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THE LABOURS OF THE EARTH-SPIRIT.

How any one can pass through one of our great factories without emotion and a certain feeling of awe, we never could quite understand. Long use, even, has made no difference to our own feelings in this respect. Some industries move us more than others; but through them all we can feel and see, in imagination, some mighty power labouring and striving towards its own end. For want of a better term, we will borrow from Goethe, and call this power the 'Earth-spirit,' for it is a mechanical power, working by physical means, using indiscriminately the energies of winds and rivers, or the stores of fuel hidden by the sun in the heart of the earth. It is not merely the glare of the furnace fire and the clang of steel that inspires this awe of the unknown. The glamour of the unseen sheds a sacred halo over every operation, if the narrow limits of our vision did not hinder our perceiving it. Of the whole gamut of colour our imperfect retinas are affected by little more than an octave; beyond the bright red on one side and the edge of the violet on the other lies a great blank. May it not be even so in other things?

Slow-moving machinery is, perhaps, of all things the most impressive. We could sit all day and watch a really large fly-wheel turning slowly and silently in its massive bearings, like the 'Wheel of Fortune' in Mr Burne-Jones's picture. There is hardly anything in the world more restful and soothing than a mill-wheel, where you get the added music of the waters. No one who visits Geneva should fail to see the machinery for utilising the motive-power of the Rhone. After a short walk along the river-bank, you enter the building where the natural forces are at work. Here in the stillness, forty steel arms, each ten feet long or so, move very slowly to and fro. They are actuated by twenty turbines, driven by the swirl of the blue Rhone, hidden beneath the

building. Between them they develop six thousand horse-power, and are used partly for supplying the district with water, partly for pumping water under a pressure of fifteen atmospheres to a reservoir in the hills, to be distributed afterwards as motive-power. One can see nothing of the force that moves these mighty arms, and one's imagination has full play. Backwards and forwards they go, slowly, resistlessly, relentlessly, moved by the waters from the Earth-spirit's own eternal snows.

The industries in which fire plays an important part are more terrifying, but scarcely give us time to think. Among them the most utter materialist cannot help feeling the presence of some higher executive power. Of the earth earthy, perhaps, but outside our knowledge. At an iron furnace one hardly notices the sprites who direct the machinery. There is the great furnace, some ninety feet high, into whose white-hot cavern come thundering large masses of coal, iron ore, and limestone. The hot blast, as it urges the materials to incandescence, seems like the breath of the Earth-spirit himself. Now the sand is removed from the tap-hole, and the viscid lava-like slag runs hissing and spluttering into pans of water. Now the lower tap-hole is free, and from the bottom of the hearth the dazzling white-hot metal runs scintillating into the moulds. A little farther off, a ball of 'puddled' iron is dragged to the steam-hammer, and the spongy metal is beaten together like putty, whilst the impurities are squeezed out. Again, perhaps we may be fortunate enough to see the Siemens-Martin furnace in which scrap-iron is worked up into steel; or to watch the Bessemer Converter at work. The large egg-shaped vessel is full of a seething mass of cast-iron, through which a blast of air is driven to burn out the impurities. The workman watches the flames as they issue from the mouth of the converter, with his spectroscope, and, when certain lines appear in the spectrum, a quantity of highly carburetted iron is thrown in sufficient to convert the

whole into steel, for steel is a compound of iron with a very little carbon. Then the great converter is swung on its axis, and the molten steel pours out into the Brobdingnagian ladle. Here is material for half the weapons in the Earth-spirit's armoury. Away it goes to the rolling mills to be fashioned into ships' plates, or into girders and steel rails. Who can say that there is no romance in our industries, and nothing but hard facts?

Very few people have any idea of the imposing and imaginative effects that are presented by even a moderate-sized gas-work, especially at night. Entering from the deserted streets, in a few minutes one is at the very heart and centre of the works, watching the exhauster engines with measured throb pulling the gas from the retorts, and forcing it through the purifying plant into the great 'holders.' Conspicuously placed in the beautifully kept engine-room is a dial with a needle, which responds like an artery to every pulsation of the exhauster. From the engine-room we walk past the station-meters, flying round as they record the passage of the gas; past 'washers,' 'scrubbing towers,' and large purifying-boxes, all looking black and mysterious in the flickering light of the scattered gas lamps, into the pleasant warmth of the retort-house. Here we are confronted by long rows of D-shaped iron discs, grouped in beds of six or eight, each one with its 'ascension pipe,' leading up nearly to the roof. The discs are the covers on the mouthpieces of the long clay retorts, whose ends only just peep out from the firebrick settings. The gas-lights are turned low, and the blackness is broken only by the glow of the furnace under each bed, reflected in the ash-pans, full of water, into which a stray cinder drops with a sharp 'sizzle' now and then. The foreman blows his whistle; the lights are turned up; the stokers troop in, and the 'draw' is about to commence. One of them, armed with an iron bar, loosens the lids of the retorts, and lights the residual gas with a live-coal from the furnace. When this has burnt off, the doors are thrown open, disclosing the yellow-hot retorts, nearly half full of coke. The radiation is so intense that it is with difficulty we stand opposite the end of the glowing tube, and, shading our eyes with our hands, peer down. We see a brilliant vista stretching away, apparently, into endless distance. Up and down its length lurid vapours curl and shimmer, and wreath themselves into fantastic imageries. A stoker, naked to the waist, pushes a long hoe-shaped rake into the retort. It is a picture to make a painter mad with envy and despair. The gleam of the concentrated rays throws every muscle, shining with sweat, into strong relief as he strains and tugs at the iron handle. At each pull, a shower of red-hot coke falls into the iron barrow beneath. Buckets of water are thrown over it, and, with loud mutterings, clouds of steam, reddened by the furnace glare, curl round the group and up to the roof. The Earth-spirit seems all around us as the coal, wrought by the trolls deep down in the earth, goes to light the busy city.

It is the same wherever we go. No operation is too mean, no industry too paltry, to be without its own share of romance. The clatter of the flying shuttles in the power-looms; the clang of the hammers on the steel plates as the rivets are driven home, and the rusty skeleton grows into the ocean steamer; the traffic in the street, the hum of the docks, all tell the same tale. Restless, ceaseless, human energy, guided by a master-hand; mayhap the Earth-spirit himself knows not whither.

AT MARKET VALUE.*

CHAPTER XIV.—THE AXMINSTER PEERAGE.

At Genoa, as luck would have it, Arnold Willoughby found a place on a homeward-bound brigantine direct for London. That was all he wanted. He craved for action. He was a sailor once more, and had cast art behind him. No more dalliance with the luxurious muse of painting. In the daily drudgery of the sea, in the teeth of the wind, he would try to forget his bitter disappointment. Hard work and dog-watches might suffice to cauterise the raw surface of the wound Kathleen Hesselgrave had unwillingly and unwittingly inflicted.

He did wrong to fly from her, of course, without giving her at least the chance of an explanation; but then, that was exactly Arnold Willoughby's nature. He would have been other than himself if he had not so acted. Extreme modifiability was the key-note of his character. The self-same impulse which had made him in the first instance sink name and individuality at a moment's notice, in order to become a new man and a common sailor, made him also in the second instance rush at once to the conclusion that he had been basely deceived, and drove him to remodel, without a second's delay, his whole scheme of life and activity for the future. Half gentleman, half gypsy, he was a man of principle, and yet a creature of impulse. The instant he found his plans going hopelessly wrong, he was ready to alter them offhand with drastic severity.

And yet, he said to himself, it was never his own individuality he got rid of at all. That alone persisted. All these changes and disguises were forced upon him, indeed, by the difficulty of realising his own inner personality in a world which insisted on accepting him as an Earl, instead of reckoning him up, as he wished, at his intrinsic value as a human being. That intrinsic value Arnold Willoughby was determined to discover and appraise, no matter at what cost of trouble and disillusion; his naked worth as a man among men was the only kind of worth he cared one jot or tittle to realise.

When he reached London, therefore, he decided to see what steps were being taken in the vexed question of the Axminster peerage, before he engaged for a longer voyage to the northern seas, which he liked best to sail in bracing summer weather. So, on the very

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afternoon of his discharge from the brigantine, where he had signed for the single voyage only, he walked into a coffee-house on the river bank and invested a ha'penny in an evening paper. He was not long in coming upon the item he wanted. 'Axminster Peerage Case.—This afternoon, the House of Lords will deliver judgment upon the claim of Algernon Loftus Redburn, eldest son of the late Honourable Algernon Redburn of Musbury, Devonshire, to the Earldom of Axminster. The case is a romantic one. It will be remembered that the seventh Earl, who was a person of most eccentric habits and ideas, closely bordering upon insanity, disappeared without warning from London society,—and so forth, and so forth. Arnold set down the paper with a deeper curl than usual at the corner of his genial mouth. It 'bordered on insanity,' of course, for a born gentleman, who might have spent his time in dining, calling, shooting grouse, and running racehorses, to determine upon doing some useful work in the world! So very undignified! Arnold was quite familiar by this time with that curious point of view; 'tis the point of view of nine-tenths of the world in this United Kingdom; but none the less every time he saw it solemnly committed to print, it amused him afresh by its utter incongruity. The contrast between the reality and the grasp of life he obtained in his chosen vocation of sailor, with the shadowy superficiality of the existence he had led in the days when he was still Lord Axminster, made such criticism seem to him rather childish than unkindly.

He made up his mind at once. He would go down to the House and see them play this little farce out. He would be present to hear whether, on the authority of the highest court in the realm, he was dead or living. He would watch the last irrevocable nail being knocked into his coffin as Earl of Axminster, and would emerge with the certainty that some other man now bore the title which once was his, and that he was legally defunct by decision of Parliament.

Go down to the House! Then a little laugh seized him. He was thinking of it to himself as he used to think in the days when he had but to order his carriage and drive down from Eaton Place to the precincts of Westminster. What chance would there be for a sailor in his seaman's dress to get into the House by mere asking for a place? Not much, he confessed to himself. However, he would try. There was something that pleased him in the idea of the bare chance that he might be turned back from the doors of the Chamber to which he hereditarily belonged on the day when he was to be declared no longer living. It would be funny if the Lords refused to let him hear them pronounce their decision of his own death; funnier still if they solemnly declared him dead in his living presence.

So he walked by St Paul's and the Embankment to Westminster, and presented himself at that well-known door where once—nay, where still—he had, by law and descent, the right of entry. It was a private business day, he knew, and their lordships would only be

sitting as a committee of privilege; in other words, half-a-dozen law lords would have come down sleepily, as a matter of duty, to decide the vexed question of the peerage before them. On such occasions, the Strangers' Gallery is never at all full; and Arnold hoped he might be lucky enough to corrupt by his eloquence the virtue of the under door-keeper. The door-keeper, however, was absolutely incorruptible—except, of course, by gold, which was too rare an object now for Arnold to bestow upon him lightly.

'I don't know all the peers by sight,' the official said with some contempt, surveying the new-comer from head to foot: 'there's peers from the country that turn up now and again when there's important bills on, that you wouldn't know from farmers. Times like that, we let any gentlemen in who's dressed *as* such, and who says he's a Markis. But *you* ain't a peer, anyhow; you ain't got the cut of it. Nor you don't much look like a Distinguished Stranger.' And the door-keeper laughed heartily at his own humour.

Arnold laughed in turn and walked away disconsolate. He was just on the point of giving up the attempt in despair, when he saw an old law lord enter, whom he knew well by sight as a judge of appeal, and who had the reputation of being a good-humoured and accessible person. Arnold boarded him at once with a polite request for a pass to the gallery. The old peer looked at him in surprise. 'Are you interested in the case?' he asked, seeing the sailor's garb and the weather-beaten features.

Arnold answered with truth: 'Well, I knew something of the man they called Douglas Overton.'

Lord Helvellyn (for it was he) scanned the bronzed face again with some show of interest. 'You were a ship-fellow?' he asked.

And Arnold, without remembering how much the admission implied, made answer with truth once more: 'Yes—at least—that is to say—I sailed in the *Saucy Sally*.'

The old peer smiled acquiescence, and waved him to follow to the door of the waiting-room. Arnold did so, somewhat amused at the condescending air of the new-made peer to his hereditary companion. In the House of Lords, he couldn't, somehow, altogether forget his traditions. 'Pass this man to the gallery,' the old law lord said with a nod of command to the door-keeper. The door-keeper bowed low, and Arnold Willoughby followed him.

The proceedings in the House were short and purely formal. The Committee, represented by one half-blind old gentleman, read their report of privilege in a mumbling tone; but Arnold could see its decision was awaited with the utmost interest by his cousin Algy, who, as claimant to the seat, stood at the bar of the House awaiting judgment. The Committee found that Albert Ogilvie Redburn, seventh Earl of Axminster, was actually dead; that his identity with the person who sailed in the *Saucy Sally* from Liverpool for Melbourne under the assumed name of Douglas Overton had been duly proved to their satisfaction; that the *Saucy Sally* had been lost, as alleged, in the

Indian Ocean, and that all souls on board had really perished; that amongst the persons so lost was Albert Ogilvie Redburn, alias Douglas Overton, seventh Earl of Axminster; that Algernon Loftus Redburn, eldest son of the Honourable Algernon Redburn, deceased, and grandson of the fifth Earl, was the heir to the peerage; and that this House admitted his claim of right, and humbly prayed Her Majesty to issue her gracious writ summoning him as a Peer of Parliament accordingly.

Algernon Redburn, below, smiled a smile of triumph. But Arnold Willoughby, in the gallery, felt a little shudder pass over him. It was no wonder, indeed. He had ceased to exist legally. He was no longer his own original self, but in very deed a common sailor. He knew that the estates must follow the title; from that day forth he was a beggar, a nameless nobody. Till the report was read, he might have stood forth at any moment and claimed his ancestral name and his ancestral acres. Now the die was cast. He felt that after he had once stood by as he had stood by that day and allowed himself to be solemnly adjudicated as dead, he could never again allow himself to be resurrected. He should have spoken then, or must for ever keep silent. It would be wrong of him, cruel of him, cowardly of him, unmanly of him, to let Algy and Algy's wife take his place in the world, with his full knowledge and assent, and then come forward later to deprive them of their privilege. He was now nothing more than 'the late Lord Axminster.' That at least was his past; his future would be spent as mere Arnold Willoughby.

Had Kathleen proved different, he hardly knew whether, at the last moment, he might not have turned suddenly round and refused so completely to burn his boats; but as it was, he was glad of it. The tie to his old life, which laid him open to such cruel disillusion as Kathleen had provided for him, was now broken for ever; henceforth, he would be valued at his own worth alone by all and sundry.

But no more of women! If Arnold Willoughby had been a confirmed misogynist before he met Kathleen Hesslegrave by accident at the Academy doors, he was a thousand times more so after this terrible reaction from his temporary backsliding into respectable society.

He went down into the corridor, and saw Algy surrounded by a whole group of younger peers, who were now strolling in for the afternoon's business. They were warmly congratulating him upon having secured the doubtful privileges of which Arnold for his part had been so anxious to divest himself. Arnold was not afraid to pass quite near them. Use had accustomed him to the ordeal of scrutiny. For some years, he had passed by hundreds who once knew him, in London streets or Continental towns, and yet, with the solitary exception of the Hesslegraves (for he did not know the part borne in his recognition by the Valentines), not a soul had ever pierced the successful disguise with which he had surrounded himself. A few years before, the same

men would have crowded just as eagerly round the seventh as round the eighth Earl; and now, not a word of the last holder of the title; nothing but congratulation for the man who had supplanted him, and who stood that moment, smiling and radiant, the centre of a little group of friendly acquaintances.

As Arnold paused, half irresolute, near the doors of the House, a voice that he knew well called out suddenly: 'Hullo, Axminster, there you are! I've been looking for you everywhere.'

Arnold turned half round in surprise. What an unseasonable interruption! How dreadful that at this moment somebody should have recognised him! And from behind, too—that was the worst—for the speaker was invisible. Arnold hesitated whether or not to run away without answering him; then, with a smile, he realised the true nature of his mistake. It's so strange to hear another man called by the name that was once your own! But the voice was Canon Valentine's, fresh back from Italy, and the 'Axminster' he was addressing was not Arnold Willoughby, but the new-made peer, his cousin Algy. Nevertheless, the incident made Arnold feel at once it was time to go. He was more afraid of Canon Valentine's recognising him than of any other acquaintance; for the Canon had known him so intimately as a boy, and used to speak to him so often about that instinctive trick of his—why, there! as Arnold thought of it, he removed his hand quickly from the lock in which it was twined, and dodged behind a little group of gossiping peers in the neighbourhood just in time to escape the Canon's scrutiny. But the Canon didn't see him; he was too busily engaged in shaking Algy's hand—too full of his salutations to the rising sun to remember the setting one.

Arnold strolled out somewhat saddened. If ever in his life he felt inclined to be cynical, it must at least be admitted he had much just then to make him so. It was all a sad picture of human fickleness. And then, the bitter thought that Kathleen had been doing just like all of these was enough to sour any man. Arnold turned to leave the House by the strangers' entrance. In order to do so, he had to pass the door of the peers' robing-room. As he went by it, a fat little old gentleman emerged from the portal. It was Lord Helvellyn, who had passed him to the Strangers' Gallery. But now, the little man looked at him with a queer gleam of recollection. Then a puzzled expression came over his fallow face. 'Look here,' he said, turning suddenly to Arnold; 'I want one word with you. What was that you told me about having sailed with Lord Axminster in the *Saucy Sally*?'

Arnold scented the danger at once, but answered in haste: 'It was true: quite true. I went out on her last voyage.'

'Nonsense, man,' the little fat law lord replied, scanning his witness hard, as is the wont of barristers. 'How dare you have the impudence to tell me so to my face, after hearing the evidence we summarised in our report? It's pure imposture. Douglas Overton or Lord Axminster made only one voyage on

the *Saucy Sally*; and in the course of that voyage she was lost with all hands. It was that that we went upon. If anybody had survived, we must have heard of him, of course, and have given judgment differently. How do you get out of that, eh? You're an impostor, sir, an impostor!

'But I left the ship'—Arnold began hurriedly—he was going to say 'at Cape Town,' when it was borne in upon him all at once that if he confessed that fact, he would be practically reopening the whole field of inquiry; and with a crimson face, he held his peace, most unwillingly. That was hard, indeed, for nothing roused Arnold Willoughby's indignation more than an imputation of untruthfulness.

Lord Helvellyn smiled grimly. 'Go away, sir,' he cried with a gesture of honest contempt. 'You lied to me, and you know it. You're an impudent scoundrel, that's what you are; a most impudent scoundrel; and if ever I see you loitering about this House again, I'll give orders to the door-keeper to take you up by the scruff of your neck and eject you forcibly.'

Arnold's blood boiled hot. For a second he felt himself once more an aristocrat. Was he to be jostled and hustled like this, with insult and contumely, from his own hereditary chamber, by a new-fangled law lord? Next moment, his wrath cooled, and he saw for himself the utter illogicality, the two-sided absurdity, of his own position. It was clearly untenable. The old law lord was right. He was *not* the Earl of Axminster. These precincts of Parliament were no place for him in future. He slunk down the steps like a whipped cur. 'Twas for the very last time. As he went, he shook off the dust from his feet, metaphorically. Whatever came now, he must never more be a Redburn or an Axminster. He was quit of it once for all. He emerged into Parliament Street, more fixedly than ever, a plain Arnold Willoughby.

If Kathleen Hessegrave wished to make herself a Countess, she must fix her hopes somewhere else, he felt sure, than on Membury Castle. For him, the sen, and no more of this fooling! Life is real, life is earnest, and Arnold Willoughby meant to take it earnestly.

(To be continued.)

THE GOLD QUESTION.

SINCE we explained the difficulties of 'The Silver Question' in special relation to the currency of the United States (*Journal*, September 30, 1893), Congress has repealed the Sherman Silver Purchase Act, and the Treasury is no longer bound to buy four and a half million ounces of silver per month, to be coined into silver dollars which nobody wants, and to be paid for in Treasury notes which must be redeemed, on demand, in gold. In the meantime, the decision of the Indian Government to close the Indian mints against the free coinage of silver—that is to say, to stop the exchange of legal-tender rupees for silver bullion with all and sundry—has not had the effect which those who advocated that course

expected and predicted. It has not kept up the gold-price of the rupee—or the price of the Indian coin in sterling money—and it did not stop the imports of silver into India. On the contrary, the shipments of silver to India were largely increased, for a time, at any rate, with the result that what is called the 'balance of trade' was turned against that country. Instead of having a large excess of exports over imports to be paid for in gold, the reverse was the case. The official minimum rate of exchange for the rupee (one shilling and three-pence-farthing) could no longer be obtained; the India Office had to obtain parliamentary powers to borrow up to ten millions sterling in London, in order to meet the obligations of the Indian Government (for interest on bonds, &c.) due in gold in this country; and the gold-price of silver and the gold-price of the rupee fell lower and lower. By the middle of February the prices of both were lower than they had ever been in the history of commerce.

By price is here meant the equivalent value in gold, and this is why the present currency and exchange disorders relate to a gold crisis. How far the recent events go to support or condemn the theory of Bimetallism, we shall not here inquire, as the subject is too complex and controversial for our pages. But having recently shown the position of silver, we now propose to examine the position of gold, because—so long, at anyrate, as Great Britain remains Mono-metallic, and perhaps even if she became Bi-metallic—it is the yellow metal that dominates the course of exchange and the price of commodities.

Gold, of course, is a commodity and an article of commerce, as well as the medium of exchange; and one reason why gold has such a high value for money purposes is that it has such a high value for a variety of other purposes. An expansion or a contraction in the world's supply of gold is felt in every department of commerce and throughout all human relations. Is, then, the supply now contracting or expanding?

The United States Treasury officials estimated the production of gold in the world during the year 1893 at about 150 million dollars' worth, and the contribution of the United States themselves at 35 million dollars' worth, or about two millions more than in 1892. Another American estimate gives 1,675,000 ounces to Australia; 1,693,111 to America; 1,200,000 to Russia; 1,563,196 to South Africa; and 1,160,000 to 'all other countries,' making a total of 7,291,307 ounces, valued at £30,972,014. This is taking the mintage valuation; but in estimating the output of mines, it is usual to calculate at 70 shillings per ounce, to allow margin for refining and contingencies. On this basis the production, as estimated by the Americans, would be about 25½ millions sterling. The American estimate, made at the beginning of the present year, has not been altogether confirmed by London authorities, who, by marshalling the statistics of all the producing centres,

give the following as the world's production of gold and silver in 1892 and 1893:

	Gold.	Silver.
1893.....	£26,228,672	£16,354,490
1892.....	24,008,430	17,795,649
Increase...	£2,220,242	Decrease...£1,441,159

The decrease in the output value of silver is partly explained by the low price to which the metal has fallen, rendering it unprofitable to work all but the best mines. In the United States, for instance, the production of silver in 1889 was to the value of £7,326,760; and in 1890 to as much as £8,416,600; but in 1893 it did not exceed 5 millions. But these figures refer only to the gold-value of the silver, not to the quantity, which in 1893 amounted to about 52 million ounces, as against about 58 million ounces in each of the two previous years, when the high-water mark of silver-production was reached in America.

To return to gold, however. The increase in 1893, as we have shown, was at the lowest estimate close upon 2½ millions sterling, of which increase the United States proportion was something like half a million. Where did the rest come from? From South Africa and Russia. The South African mines yielded £5,622,250 in 1893, as against £4,633,879 in 1892; and the Russian mines £5,394,172, as against £4,844,363; while Australia did little more than preserve its level. The interesting fact is established that South Africa is now the second largest gold-producing area in the world—Australia still being first (with £6,560,000); South Africa, second; Russia, third; and the United States, fourth.

The development in South Africa is one of the phenomena of the situation. Seven years ago, the entire output of gold there was under 20,000 ounces, of the value of £70,000. Last year the output was 1,596,477 ounces, of the value above stated. It is predicted that in another year Africa will have shot ahead of Australia, and will be the foremost gold-producing country in the world. In round numbers, South Africa, which previously was not in the running at all, has since 1886 added about 18 millions sterling to the value of the world's stock of gold—in fact, we may say since 1888, for up to that year she had not sent us as much as a million altogether.

To appreciate the significance of this, it is necessary to recall that the prolonged depression of trade and the depreciation of silver have both been attributed to a diminution in the supply of gold since 1874, concurrently with an increasing demand for it. As gold became comparatively scarce, the value of the sovereign—that is to say its purchasing power measured in other commodities—rose. Prices were low because gold was dear, and because the nations could not agree among themselves that silver should be adopted as an alternative, or associated, measure of value. If, then, gold is becoming more plentiful, it would be reasonable to expect, other things being equal, a general rise in the level of prices of commodities, and a gradual abatement in the acuteness of the trouble connected with silver.

Those whose memories can carry them back to the Franco-German War will remember the tremendous 'boom' in trade which followed the conclusion of peace, and the high prices to which both the necessities of life and luxuries rose for a few years. As a single example, let us just mention pig-iron—the foundation of so many industries—which in 1873 reached 145 shillings per ton, while for some years past it has been ranging between 40 and 45 shillings per ton. The decline in prices which began after this inflation has brought us, in twenty years, to a level which would have seemed incredible and impossible in 1873. To what has that decline been due? First of all, to the diminished and steadily diminishing production of gold; next, to the increased and constantly increasing demand for gold for currency and other purposes; and lastly, to the demonetisation of silver by Germany, and the suspension of the Latin Union, explained in a previous article. Of these three causes, unquestionably the greatest was the decrease in the supply of the yellow metal from the mines. Few people realise how the world has been affected by the vicissitudes of gold-mining. After the Australian discoveries, and between the years 1851 and 1860, the average annual production of gold throughout the world was not less than 28½ millions, according to Dr Soetbeer, an acknowledged authority. But in the next decade the average fell to about 26½ millions sterling; in the next period, 1871–80, to 23 millions; and between 1881 and 1884, to 19½ millions, or a decline of more than one-third from the highest.

Now, it was just in this period, when the supply of gold was falling off, that Germany adopted a gold standard of currency; that the United States resumed specie payments, and that gold became more and more in request among the other nations both for money and for the arts. It is assumed, however, that the consumption of gold for money has now nearly reached its maximum, that the 'reserves' among the great nations are as large as they need to be, and that in the next few years the mintage demand for the yellow metal will be smaller than it has been during the last twenty years. Since 1885, the lowest point of production, three quite new sources of supply of gold have been found: South Africa, as we have seen, which is now yielding 5½ millions per annum; Western Australia, which last year yielded close upon half a million; and India, which is now yielding considerably over half a million per annum. With the increased productivity of the rest of Australia, of Russia, and of the United States, due to the improved methods of mining and of the treatment of ores, the production is once more approaching the annual average of the rich period, 1851–60. Indeed, some experts predict that in the present year the total yield will be considerably more than 30 millions sterling.

There is no room for wonder, before these facts, that silver has become so depreciated in relation to gold, that exchanges are disorganised, and that the currencies of silver-using countries have become demoralised. We are passing through a monetary revolution, which, like all revolutions, must be productive of discomfort

and loss somewhere, but which in its ultimate results ought to be beneficial. Within one generation, monetary revolutions of varying severity were brought about by the discoveries of gold in California and Australia, by the discovery of silver in Western America, by the demonetisation of silver in Germany and the suspension of the Latin Union, and by the Bland and Sherman Acts of the United States. The present crisis is in part the result of the discovery of gold in South Africa, and in part the result of the silver policies of the United States and India. (For further explanations on these points, see previous articles, 'What is Bimetallism?' and 'The Silver Question'.)

Commenting on the South African mines, a recent writer in 'The Bankers' Magazine,' says: 'The first great disturbance in recent times of the world's output of gold occurred in California and Australia in the decade of the fifties. The production during these years reached a total of something like 30 millions sterling annually for some years. The inevitable of quartz-mining then appeared; veins pinched out, or from various causes, became unworkable, and the production gradually dropped to about 20 millions of pounds sterling per annum, or less. This amount would appear to have been about an average production until the last year or two, when the increasing yields of South African and Indian mines commenced an era of increase destined to last the lifetime of the present generation, and probably that of the generation to come.'

The minimum production of gold, then, lasted for about twenty years. But in that period the production of silver reached its maximum, and the present price (in gold) of the white metal (say, half-a-crown an ounce) is just about one-half of what it was twenty years ago. Of course the Bimetallists say that had the two metals by international agreement been combined in a dual standard, the scarcity of gold would not have been felt, and the prices of commodities would not have depreciated. On the other hand, those opposed to Bimetallism contend that the effects prove their case—that it is impossible to maintain a fixed ratio between two metals of such varying supply, not only in actual quantity, but also relatively to each other. Of course the more scarce gold became, the more valuable it was, and therefore the prices of everything measured in gold went lower and lower. But that simply meant, as far as the masses of the people are concerned, that though they were able to earn less, they could obtain more for their money than in the year of big profits, high wages, and inflated prices.

Prior to the Californian discoveries in 1848, the annual average supply of gold was only about eight millions sterling, and commerce was languishing because the world had outgrown its supplies of the precious metal to adjust exchanges. The Californian discoveries were followed in 1851 by the opening of the Australian fields, and then it looked as if the world were to be smothered in a deluge of gold. So anxiously did some economists then regard the situation, that it was seriously proposed and gravely discussed that gold should be

demonetised, to stop the rise in prices. It is interesting to recall this proposal after forty years, at a time when prices are depreciated, according to some, by the demonetisation of silver, and when it is proposed again, not truly to demonetise gold, but to some extent to debase it by wedding it to the inferior metal. As the production of silver in 1870, when the value was five shillings per ounce, was worth £11,350,000, and as the production in 1893, when it was only worth, say, three shillings per ounce, was £16,350,000, it is evident that the supply of that metal has about doubled in quantity. But no further uses for it have been found in the arts, and it has become of less and less use as money, since the Continental nations decreed that it should no longer be legal tender. On the other hand, the uses for gold are constantly increasing, and while the currency requirements of Europe are now supposed to be satisfied, the United States will still require a large amount, estimated at not less than ten millions sterling, to make up the loss on the silver stored in the Treasury vaults under the Bland and Sherman Acts.

It was estimated by Mr Seyd that the entire stock of gold coin and bullion in the world serving the purposes of money—not including ornaments and the hoards of Eastern nations—is about 800 million pounds sterling; and of silver coin and bullion, about 720 million pounds sterling. This calculation was made some years ago, and we should be disposed to add half a million to each total as the present approximate sum. Anyhow, there is, roughly speaking, only about £2 of exchangeable gold for every person in the gold-using countries of Europe, North America, and Australasia. In a former article, we estimated the amount of gold annually used in the arts, or hoarded, or otherwise not put into currency, at 15 millions. On the present average production, therefore, there will be a margin of 11, and on the anticipated production, a margin of 15, millions available for coinage and as the basis of exchange. Now, looking at the effect which the enormously increased output has had on the value of silver, what are we to expect from this large increase in the supply of gold?

Obviously, a considerable fall in the value of the metal, which means a considerable rise in the prices of commodities and property. What happened after the Australian discoveries may be expected to happen now, though not to so tremendous an extent, nor so rapidly, because there are, as we have shown, many gaps to be filled up before the world can feel anything like an over-supply of gold. It is true that some people predict for the South African mines a yield which will vastly exceed even the highest point reached by the Australian fields; but we prefer not to deal with speculative predictions. It is safe enough to go upon the actual facts of the last year or two, and the immediate prospects as presented in the monthly workings.

It is, of course, curious that while South Africa has already added as much to the gold-supplies of the world as California and Australia did at the outset, we have not yet had the change in values which then almost at once

began. But there are various reasons for this. The world is larger, for one thing, and the area of distribution of gold for money purposes is much greater. The great depreciation in silver is another, for this has had a serious effect on prices in, and exchange with, the East. And the Australian and American commercial crises are other factors accentuating the general problem. But as gold becomes more abundant, silver should, along with other commodities, increase in value measured in gold, and in the ordinary course of events the tribulations of India ought to be relieved, not by the adoption of universal Bimetallism—for that now seems hopelessly impossible of attainment—but, strangely enough, by the new gifts of gold from Africa.

MORE THAN CORONETS.

CHAPTER V.—CONCLUSION.

VERA was conscious of only one feeling for the moment, a feeling of intense gladness that she was alone to grapple with the trouble which had come upon her. The discovery of an heir to Deepdene other than Dene de Ros had been like a bolt from the blue; but the latter revelation came like a flash of lightning out of a winter sky. It was worse than misfortune; it was disgrace. Vera had dropped the packet, and wrenched herself free from Ambrose de Ros' detaining grasp, fleeing homeward like Atalanta across the dewy lawn. Not until she reached her own room was she conscious that her stockinged feet were torn and bruised—no thorn by the wayside had troubled her.

The shadow of disgrace hung over her; and Ambrose de Ros knew it, had evidently been aware of it for a long time; and yet he had never swerved in his friendship, never so much as shown by one single sign that he had discovered how cruelly the late owner of Deepdene had deceived him.

Remember, that Vera's life had hitherto been apart from the world; she had lofty ideals of her own, and the rude touch of modern life had not taken the gilt from any idol, showing the feet of clay. Her pride in all her possessions had been great; she had regarded her father as a prince amongst men. How passionately she had admired him when misfortune had come upon them, and he gave way to the intruder without a murmur, and as a dethroned monarch would abdicate his crown. And, in her inmost heart, Vera had despised the degenerate offshoot of the race who had deposed the reigning sovereign. She would not admit that he could have risen to the sublime height attained by her father. And yet, all these years she had worshipped a trickster and a charlatan, an impostor who masqueraded in the armour of a gentle knight of high degree.

It was a harsh judgment for a negative crime committed in a moment of the fiercest temptation; but youth is prone to be hard in its judgments, and it is always those who have known no ungratified desire who are the hardest upon the weaknesses of poor human nature.

It was all over now, Vera told herself; the pleasant days had come to an end; she could

never show her face at Deepdene again. The organ would remain unplayed; she would tell her father of her discovery on her return, and then she would go away, never more to be seen by those who knew her story.

She was thankful that Ambrose had not followed her. All the afternoon she half expected him, but he came not. She never imagined that he was waiting until she could wrestle with and fight down her sorrow before he approached her. And, later on, when she was partaking of tea in solitary state, he arrived, and, unannounced, came into the drawing-room. Vera's back was to the light, which was softened and subdued by the palms in the long narrow windows, and he could not see the look of misery in her eyes.

Apparently, he was not in the least embarrassed; indeed, when you came to consider it, there was no reason why he should be. He sat down by the little gypsy table on which stood the quaint service of silver, and begged for a cup of tea. The smile on his handsome, simple face was pleasant to see.

'Well,' he said cheerfully, 'we did better than I expected with those poor fellows. None of them seem to be the worse for their adventure.'

Vera was conscious of a little pang of conscience. For some hours now, she had not given the shipwrecked mariners a single thought. 'I am glad to hear it,' she said in a strangled voice. 'How pleased David must have been. He behaved like a hero.'

'He did his duty,' Ambrose remarked; 'my boy would always do that. And they all turned out and cheered him afterwards till the tears came in my eyes. Pity you weren't there as well, because David would have liked it.'

'David does not know everything,' Vera said bitterly, conscious of a little tinge of reproach in the speaker's voice. 'If he did, he would hate me.'

Ambrose made no reply for a moment; he appeared to be rapidly contemplating a sportive satyr depicted on the frescoed ceiling. Then a goat-hoofed Pan seemed to engage his earnest and critical attention. 'David does know everything,' he said quietly, without moving his eyes. 'In fact, it was David who first let me into the secret. You see, some two months ago I happened to be turning out the contents of old Del Roso's casket, when I came upon a bundle of letters—you know the ones I mean.—By the way, my dear, how did you come to discover them? You left me so hurriedly this morning, that I hadn't time to ask you any questions.'

Vera explained. So long as she was generalising upon an abstract bundle of papers, the words came glibly enough. She saw how the lines of the listener's mouth tightened as she proceeded with her story.

'Then Swayne knew all about these letters?' he asked curtly.

'Yes; he had found them there years ago, and had left them for safety. He did not know when they would be useful. There was no opportunity of abstracting them before my father dismissed him; but no doubt Swayne had taken notes of addresses. No wonder that

he found you so easily in Australia. Then he tried to blackmail my father, as you know, without success. Again the letters were useless. But when *you* dismissed this man as well, he saw his way to—to— Vera's voice died away to a murmur; she could say no more.

Ambrose took up the broken thread for her; his face was grave, yet his eyes kindly. 'And you read those letters,' he said. 'My child, if what I say seems cruel, remember it is my earnest desire to be kind. You read those letters from my father to yours, telling the latter everything. Yes; I have read them myself. Leslie de Ros wrote to his kinsman here from time to time; but he never told my mother and myself that he had done so—we knew nothing. It was his desire that the succession which he had forfeited should remain in the present hands. He asks your father to preserve that secret. My father dies, and the secret with him. And then Dene de Ros is left absolutely master of Deepdene.' Ambrose concluded with the triumphant air of a man who had absolutely proved his case.

But Vera declined to see it in the same light. 'You have forced me to speak, and I must,' she replied slowly. 'It was wrong. You know it was wrong. My father traded on your ignorance of your proper position to enjoy the property here for twenty years. He assumed to be an honourable man, whereas he was an impostor.—Oh! to think I should feel the bitter shame of saying so much of my own father. It was his duty to disregard that foolish wish. We should have found you out and restored you to your own.—You shake your head. What would you have done under the same circumstances?' Vera bent forward with fierce eagerness to catch the reply.

For once in his life, Ambrose de Ros was tempted to prevaricate. He looked up helplessly at the goat-hoofed Pan, but derived no inspiration therefrom.

'Your silence is an eloquent reply,' Vera continued. 'You could not have done such a thing.—Oh, I have watched you for this year past. I was prepared to dislike and despise you; but my prejudices have turned to something like affection, because you are a good man and do good things. And when I was getting reconciled to everything, this trouble comes upon me. How can I ever look the world in the face again?'

There were tears in Vera's voice as Ambrose de Ros rose and laid his hands upon her shoulders. When he spoke, his voice was soft and sweet as a woman's. 'My dear,' he said, 'this is your first trouble, and you find it hard to bear. But if we forgive and forget, why should not you? You are not injured at all. There is no one amongst us, man or woman, who has not yielded to some temptations. There is none amongst us without sin to cast the first stone. Your father's temptation was great; he was only obeying the injunction of a dying man. And again, do you think he did not consider you? And then, did he not act honourably when I came forward and claimed my own? He could have bribed Swayne into silence; but his nature abhorred such a deed. My dear, he is your father.'

Vera made no reply for a moment, and yet it seemed as if the great weight about her heart was melting like snow in the genial sunshine.

'We ought to have destroyed these letters,' Ambrose de Ros went on. 'But I did not care to do so, because they were written by the husband of my mother. That is why we put them back in the old casket, thinking they would be safe there. It was a kindly providence that placed them in your hands.'

'A providence destructive of my happiness,' Vera murmured.

'You are wrong,' Ambrose replied. His voice was not devoid of severity. 'It is a lesson from which you will profit. Pride, my dear, is your besetting sin; it hides the perfect, generous woman; it keeps you away from the rest, as if you were a different clay, a thing apart. My dear, that wonderful poet of yours, whose works I am just beginning to understand, tells us that "Kind hearts are more than coronets, And simple faith than Norman blood." Ah! when you come to mix with the world more, you will understand what that means. I am not like you; I lack your advantages.'

'No; you are not like me,' Vera burst out impetuously. 'You are a thousand times better, and I thank you for your kindness.—Oh! you dear, kind, generous, simple-hearted man, what a lesson you have given me! I am glad that you came here; I am glad the estates are yours, because you are much more worthy to control them than we are. And the people here are happier and more contented; I can see it in their faces.' Vera covered her face in her hands, and burst into tears.

Ambrose waited until the sun shone out from behind the clouds before he spoke again. 'Now you begin to be yourself,' he said. 'You will forgive your father?'

'Yes, if you wish it,' Vera said with a new sweet humility, 'I will.'

'I have done so long ago, remember. You will meet him as if nothing had happened; and this matter shall never be mentioned between us again. Those letters have been returned to the old casket, because it is my fancy that you should take them out and destroy them with your own hand. The secret belongs to three of us—Swayne we shall never see again—and it shall be laid aside for ever. You must come up to-morrow.'

Vera nodded; her lip was quivering, and two diamond drops trembled on her long lashes. The tears, so rare with her, seemed to have washed all her pride away. As Ambrose rose, she came to her feet, and taking a single yellow rose and maidenhair from a glass, pinned it on his coat. 'These are my colours, and you shall be my knight,' she said almost gaily. Her voice was still unsteady, but thrilling with happiness. 'You have won your way into my heart against my will; but you cannot say that my capitulation is not graceful. "Sans peur et sans reproche." That is you, sir.'

'I don't know what that means,' Ambrose said simply. 'But it signifies that you look a thousand times handsomer and sweeter, now you are your natural self, I'm not going to argue the point.'

'And I feel it too,' Vera confessed.—'Yes, you may kiss me.'

The storm had died away along the deep; the oaks on the crest looked like sentinels; the waves rolled lazily in to the shore. Only the wreck lay on the granite spar, evidence of the tempest of yesterday. Already most of the wrecked sailors had departed for the nearest port of Hull; the wild feeling of excitement had subsided into quietness, for loss of life along that coast was, alas! no novelty.

Vera toiled along up the slope in the bright sunshine. She was on her way to the shore, before calling at Deepdene on the errand which Ambrose de Ros had placed in her hands. As a matter of fact, Vera wanted to view again the scene of David's exploit, to pore upon it sentimentally. Not that she admitted this to herself; she would have been angry had any one suggested it. She had no idea that this indignation would have been a direct evidence of love. But then Vera had no acquaintance with psychological analysis, since her knowledge of the works of Messrs W. D. Howells and Henry James was nil.

It was hard to realise the vivid scene of yesterday in the blue placidness of to-day. A little ridge of white bearded the shore, gray gulls floated idly on the water, a shag was gravely fishing off the wreck. Vera smiled at the contrast; her laugh rippled out on the air, and presently brought some one from behind a rock to listen. It was David, grave and courteous as usual.

'You here!' Vera faltered. 'I—I thought that I should be alone.'

She coloured at the boldness of the speech and the impression it conveyed. But David did not appear to notice anything calculated to wound. He only saw that Vera was wonderfully sweet and fair, and that there was a gentle light in her eyes that had never shone so meekly there before.

'I daresay,' he replied mildly. 'I'm looking for a knife I lost yesterday.'

Vera's laugh rang out loud and sweet. The anti-climax was too ridiculous. But it seemed to remove the feeling of restraint between them. 'Strange,' Vera said, with a little mocking note, 'that a man who is so reckless with his life should think so much of a pocket-knife.'

'It was given to me by a man who is dead,' David explained with a simple directness that reminded Vera of his father. 'Besides, it matters little to any one what becomes of my life.'

'For shame!' Vera cried indignantly. 'Think of your father.'

David laughed gently. By this time they had turned by mutual consent, and were climbing the cliff side by side. 'I do think of my father,' he answered. 'I have nobody else to think of. And yet, from your loftier standpoint, he is nothing but a poor, uneducated man, who occupies a position to which he is not entitled.'

Vera paused a moment, and laid her hand upon David's arm. Her lips were quivering, her eyes luminous with tears. All the pride

seemed to have gone out of her face, leaving it more beautiful than ever, and infinitely more sweet and womanly. 'You are wrong,' she said in a low voice. 'That was my opinion at first; but I have changed my mind. I regard your father as one of the best and noblest of men; and, were he ever so nearly related to me, I could not love him more; and I care not who hears me say so.'

'I am glad to hear you say that,' David replied. 'I always told you what a splendid man he is; and you recognise it at last.'

'I recognised it from the very first,' Vera replied, determined to make her confession full and absolute. 'I recognised it at once; but my foolish pride would not permit me to own it. And my feelings were the same towards you.'

But David refused to be quite pacified. Latterly, he had schooled himself to think nothing further of Vera save in a brotherly way. By this time they were passing through the woods trending down to Deepdene; the flaming torch of autumn blazed on the leaves, casting a red glow on Vera's cheeks. But the scarlet flush there was not all forged by the gleam of nature's furnace.

'That is kind of you,' David said, a little bitterly. 'But you are a thing apart from me. I am not mate for the caste of Vere de Vere.'

Vera made no reply. David cast no look at her as they entered the hall at Deepdene together. He knew why she was there, but he made no effort to accompany her when she turned towards the staircase. He stood before the burning logs on the hearth, his feet upon the hammered iron rail. It seemed to Vera that her pride had gone out and entered his soul.

She hesitated for a moment. A strange timidity had taken possession of her. She pronounced David's name softly, the first time she had ever done so, and he turned swiftly to her, his face aflame, expectant. The purple and amber light flashing from the storied device in the lancet window fell full upon her. There was supplication in her eyes, a warm look of invitation far more eloquent than any words could be. 'David,' she whispered again, 'come along with me; I want you.'

There was no occasion for her to repeat the command; he was by her side directly. He saw that the hand resting on the rail was trembling. Without a word spoken on either side, they passed into the gallery and along the dimly lighted place till they reached the casket of Del Roso. Vera opened the lid and fell on her knees before it. 'Help me,' she said, 'since you know what I require.'

Presently Vera had the fateful papers in her hand. She clasped them close until David had replaced the parchments; then she broke the string that bound them and dropped them in a fluttering heap on the hearth of the wide capacious grate. As if it were some solemn ordinance, David struck a match and applied it to the yellow pile. Gravely and quietly the twain watched until the sobbing points of flame died down sullenly, and nothing but a pinch of gray feathery ashes remained.

'It is gone, forgotten,' David murmured. 'Let it not be mentioned again.'

'But it must be,' Vera said with glowing eyes. 'David, do you know that I am glad I found those letters? Is not that a strange thing to say?'

'Well, rather,' David confessed. 'I should like to know your reason.'

Vera's face was turned upwards; her eyes were glowing with a luminous light. 'Because they killed my pride,' she murmured. 'They showed me how poor and mean I was; how noble and high-minded you. Forgive me, David; you would not have me say any more?' She held out her white hands to him, her face full of supplication.

David took the fluttering fingers in his own and held them firmly. 'There can be no half-measures between us,' he said almost sternly. 'I must have all or nothing. Vera, do you mean that you are mistaken—that you can care enough for me to be my wife?'

'Yes; I ask no greater honour; I covet no dearer happiness.' The eyes were clear and steadfast, the eyes full and true.

Very tenderly David took her in his arms and kissed her quivering lips.

Then, with a sudden impulse, Vera burst from him, and, crossing to the organ, played a wild 'Gloria in excelsis,' full of rich triumphant chords. 'It is the "Te Deum" for a soul that is free,' she explained reverently. 'The shadow of the past is uplifted, the morning of content is here. David, I have solved the enigma of Del Rosso's poesy. Read it aloud, please.'

'Thys was my arke of safetie, here
I found the Englyshe shore;
Thys is my home, and here withyn
Is troubl gone and o'er'—

David quoted slowly. 'I think I can see your meaning, dearest.'

Vera laughed as she laid her head upon her lover's shoulder. 'Yes, this is my home in very sooth,' she said; 'and there, better, I discovered that which caused my trouble to be "gone and o'er."—And now, let us tell your father.'

They passed down the stairs hand clasped in hand; the light, filtered through the device of De Ros, fell upon Vera's face and made it glorious.

NORWEGIAN FOLKLORE.

THE stern grandeur of nature in Norway, the monotony of the long dark winters, and the wonderful fertility of the bright summers, have all manifestly contributed to the mythology of the Norsemen. Recent scientific investigations have proved that the Old Norse myths recorded in the elder Edda bear traces of the Christian religion and the Roman mythology transplanted on Northern ground and in a wholly national form. But the Norsemen also drew their ideas of their divinities and their different functions from the world around them; and the wild and beautiful nature-picture in which they dwelt presented a happy hunting-ground for their imagination. On the introduction of Christianity, the old deities disappeared as objects of

worship; but their memory is still a living one on the lips of the people. Our rich folklore shows distinct traces both of the influence of the physical world and the remains of heathen myths. The treasures of poetry living in song and story were well-nigh unknown till 'Asbjørnsen and Moë' in the middle of this century began collecting tales and legends, and thus made the whole nation acquainted with a side of its own individuality hitherto ignored.

The popular imagination peopled nature with supernatural beings with habits and occupations akin to the inhabitants themselves. In the valleys of the interior of Norway, away among the deep woods and rich pastures, the 'huldre' reigns supreme. Those who see her are generally shepherd-boys or milkmaids, who tend their flocks and herds on the 'sæter' in summer. To them the huldre appears as a tall and lovely woman with golden hair, driving a large herd of well-fed kine before her. But her beauty is but skin deep, for in reality she is ugly and disgusting, and her garments cannot hide the emblem of her origin—the cow's tail. So great is the fascination she wields, that those who come under her influence forget everything for love of her. Often when the peasant is cutting trees in the wood, he sees a fair girl sitting on the grass with her knitting, or he meets her driving her cattle. If he follows her, he will be taken into the mountain, and for ever say farewell to the society of men. The only way to save such is to set all church-bells a-chiming, and then the elves must let their victim go. But even when rescued from the enchantment, he who has been in the mountain never loses the impress which his life with the huldre has made upon him: he grows visionary, and never goes anywhere without seeing elves. There is, however, one way of seeing the huldre without harm, and that is if one can only get hold of the cap of invisibility, a most accommodating article of dress. Having this on, one is safe, and can without danger brave everything.

In one of his stories about the huldre, Asbjørnsen tells the following legend: On a sæter somewhere in Hadeland, it was impossible to tend the cattle, as they got so frightened by strange noises during the night. At last a maid came who was going to be married in the autumn, and whose betrothal feast had already been celebrated. As soon as she appeared, everything became quiet, and there was no difficulty in managing the cattle. She stayed on the sæter, her faithful watchdog her only companion. As she was sitting in the kitchen one Saturday afternoon, a great many women came in bringing with them her wedding dress and all kinds of ornaments, and began to dress her. She thought this very strange, but felt unable to resist them in any way. The dog, however, feeling uneasy, ran off to the farm where her betrothed lived. Suspecting some-

thing wrong, he took down his gun and set off for the seter as fast as his legs would carry him. Arrived there, he saw a great many carts standing in the courtyard, and instantly thought of the elves. Being a prudent lad, he first looked through the window, and there caught a glimpse of his bride in her wedding dress, with the bridal crown on her head. She was quite ready, and only wanted a ring on her little finger to give her up to the elves. The lad loaded his gun with a silver button, the only telling missile against these folk, and fired into the room. In an instant the door opened, and one ball of gray worsted after another came rolling out; and all the food which the huldre people had brought with them had turned into nothing but mud and toadstools. The lovers of course were married at once, to prevent the elves getting any power over the bride, and the crown is still to be seen at the farm.

As the huldre is met with among the mountains, so the 'nisse' is busy in the stables, and keeps to the house as a domestic spirit. He appears as a little old man with a long gray beard, dressed in gray, and with a red pointed cap on his head. If treated kindly, he is good-natured, and lends a helping hand: the horses which he feeds are always glossy and well kept, and everything thrives under his care. But if he is taken no notice of, he takes his revenge in doing all sorts of mischief, and makes it thoroughly hot for the poor inmates of the house.

As life in Nordland is harder and more exposed to danger than in the southern parts of the country, so the folklore assumes a darker and wilder hue. In the autumn storms, when the fisherman is sailing for dear life through the stormy seas, the shrieks of 'drangen' make his blood curdle, for a look from the drang means death. This evil spirit, so feared by the seafaring part of the nation, appears as an old gray-haired man racing through the waves with the horror-stricken fisherman. Sometimes his hands only are visible, clinging to the thwart, but this is as ominous as seeing him in his large boat.

But not only are there lofty mountains, washed by a wild and stormy sea here in the North, for at the heads of the fjords the birches spread out their green and feathery boughs, and the wild strawberries scent the air. The thought of this delicate beauty has created the tale of a lovely fairyland, floating like an island on the waves. The favoured inhabitants of this island of bliss are fishermen like the less favoured mortals, but the sun there shines on richer meadows and yellower cornfields than elsewhere. Happy the man who, sailing in his boat one day, sees Udröst. There is a story of a poor man called Isac who was out fishing in stormy weather, and who, at last, coming to a beautiful island, went ashore. There were waving barley-fields and soft pasture, and on the coast was a small house, on whose roof a goat with gilt horns was browsing. A little man clad in blue was sitting on a stone in front peacefully smoking his pipe. He asked

Isac where he was going, and would have invited him to enter, but that he did not know what to do on the return of his three sons, as they could not stand the smell of Christian blood. Though rather scared at this, Isac entered the house, where he was treated to a meal the like of which he had never before tasted. Soon afterwards a great noise warned them of the approach of the three sons. Their father had great difficulty in pacifying them; but they ended in getting so friendly with Isac, that they went out fishing together the next day. The first day Isac caught nothing, as he used his own fishing-tackle; but on the two following days, when he borrowed the fishing-net of the old man, his boat was quite filled with the largest cod-fish he had ever seen. He reluctantly took leave of the inhabitants of Udröst; and when, next spring, he was to go to Bergen, a large boat, the gift of the elves, lay ready for him. Ever after he thrived well, succeeded in everything, and became a rich man. Though he never saw the elves, yet every Christmas Eve the light shone out from his boathouse down on the sea-shore, and the sound of their dancing and music from within was heard.

The clergy have from olden times been considered as peculiarly adapted to dealing with evil spirits. By the aid of the mysterious 'black-book,' they knew how to conjure up the evil powers and deprive them of their assumed forms. The Evil One—'Old Erik'—plays a prominent part in these encounters with the clergy. He is represented as an ordinary peasant with nothing specially diabolical about him. The only suspicious thing to a close observer is the fact—and here he bears some resemblance to his Scotch kinsman—that his left leg is furnished with a horse's hoof, and that his nails are extraordinarily developed. Old Erik delights in playing all sorts of tricks on people: he plays at cards with the peasants, cheating them disgracefully; places himself in the middle of the road, frightening the horses out of their wits, and does many other things more serious.

The Norwegian peasant has in times past been skilled in music and in the making of his favourite instrument, the violin. But the musician has not learned the sad sweet airs and wild weird dances from a human teacher. Sitting by the banks of a 'fos,' he has been listening to the music of its denizen the 'fossegrim.' He who wishes to profit by the teaching of the fossegrim must go to the river and throw in a large leg of mutton, and then the fossegrim will appear to him in the midst of the 'fos' playing on his violin. His strains are enchanting: at one moment so sad and touching as to make one weep; then, again, merry like a whirling dance, or expressive of wild passionate feeling. Whether the pupil will become a good musician or not depends upon the size of his gift; and if the leg of mutton is a very large one, he will be a true artist.

The belief in these supernatural beings who made hill and dale, fjeld and fjord, alive with their presence, is now fast disappearing, though much of the old superstition still remains, especially in Nordland and in the valleys of Inner Norway. But though the belief in the folklore may pass away, the legends themselves will continue to live in the memory of the people

for many a long day, and will always form a rich source wherefrom to draw information about the past intellectual life of Norwegian people and their ways of thinking.

THE MONTH:

SCIENCE AND ARTS.

THE patent for the justly celebrated Bell telephone expired on the 30th day of January last, and it is now open to any one to make these instruments either for sale or for individual use. But it must be understood that this only applies to the hand-receiver, patents governing other parts of the apparatus being still in operation. With a couple of simple receivers, however, it is possible to carry on a conversation over a distance of some eight or ten miles without a battery, the only condition being that a metallic circuit exists between the two correspondents. The wonderful simplicity of Bell's telephone, comprising only, as it does, a bar magnet, a coil of wire, and an iron diaphragm, marks it as one of the most wonderful inventions of a prolific century. We have now become so accustomed to the transmission of actual speech over vast distances, that we hardly realise what a scientific triumph this telephone represents.

Discussion on the new Scottish Fishery Bill has directed attention to the possible cultivation of the mussel as a rival to the expensive oyster. The first-named mollusc has, we fancy, somewhat fallen into disrepute in this country from assertions as to poisonous properties, which have undoubtedly led in more than one reported instance to fatal results. But for many years in France the mussel has been cultivated in such a fashion that disasters of this kind are unknown. The apparatus employed is known as 'buchots,' and comprises stout poles bound together with wattles, to the lower parts of which the spat attaches itself. As the mussels grow, they are removed to the upper wattles, so that at every tide they are bathed in fresh food-bearing water, and run no chance of contamination. It has been suggested that the mussel industry might be carried on profitably on the lower reaches of many of our larger rivers.

Dr William Moor, a physician of New York, has made the discovery that Potassic Permanganate, which is best known to the general public in the form of a disinfectant called 'Condy's Fluid,' is an antidote for morphine poisoning. In the presence of a number of medical men, he swallowed three grains of morphine, which is ordinarily a fatal dose; and he followed this by drinking a solution of four grains of permanganate in as many ounces of water. For five hours the physicians present carefully watched the subject of this bold experiment; but the morphine had no more effect upon him than if he had swallowed the same

quantity of table salt. Dr Moor asserts that the remedy is quite as efficacious with other preparations of opium, if the antidote be acidified with vinegar before administration.

Two miles from Shepton Mallet, in Somersetshire, at a place called Ashwick Court, there is a well which for a long time has yielded water slightly tainted at times with petroleum. In July 1892 a considerable flow of the oil took place during a very dry season, and this has at intervals been repeated, in smaller quantities. Signs of the presence of petroleum have also been detected in other wells of this district. This interesting matter is now being investigated by experts.

An official connected with the Georgia Southern and Florida Railway writes in favour of electric headlights for locomotives in place of the usual oil lamps, and states that the latter will not discover an obstacle on the rails at a greater distance than one hundred and fifty feet, and that it is next to impossible to pull up a train in that distance. The electric light, on the other hand, will illuminate the track for from one-half to three-quarters of a mile. A good plea for the adoption of the electric light on the railway in question is afforded by the circumstance that cattle, especially in the rainy season, will stray on the line in the hope of finding a dry spot on which to sleep, and that the claims for slaughtered beasts brought against the company are constant and onerous. Sometimes, when the oil light was in use, as many as thirteen beasts have been killed on one occasion; but since the electric light has been employed, not a single animal has been run down. Therefore, it is surmised that the saving in the matter of stock claims will quite cover the increased cost of the new lights.

Identification by photography has for a long time been an important feature of our police system, and a 'wanted' man has often enough been tracked owing to the publication of his photograph. But this method of identification is not always quite as reliable as might be thought, for although nature does not often turn out duplicate faces, we know that resemblances between persons are occasionally met with. A case occurred lately which shows that the police must be careful to substantiate photographs by other proofs wherever possible. A man was charged with burglary, and pleaded guilty, but denied that he had been before convicted. The police thereupon produced a registered photograph and a description of the prisoner. The photograph certainly bore some resemblance to the suspected man, but the description told of tattoo marks which could not be found, whereupon the previous conviction had to be abandoned.

It is generally well known that an eggshell of the Great Auk is worth something like its weight in diamonds, and the price which was lately realised in a London auction mart for one of these curiosities kept up the tradition, for it fetched three hundred guineas. This particular egg had quite a respectable pedigree. Originally purchased in a curiosity shop in Paris by Yarrell for two francs, it remained in that writer's collection until his death, when

it was sold for twenty guineas. This was less than forty years ago, and it has remained until now in the purchaser's possession. There are only sixty-eight of these eggs which are known to collectors, hence the high price which a specimen commands.

Some months ago we were constrained to inquire why the phonograph, of which such great things were anticipated when it was first given to the world by Edison, had not come into actual commercial operation. Since then, we have been inundated with the clever contrivance, and there must be some thousands in use for exhibition purposes. In our own country the phonograph has not passed this stage. But in America, we understand, it is different, and phonographs there are being used by business men in place of an amanuensis. The plan adopted is either to speak to the instrument so as to make the record, and leave a clerk to subsequently translate the speech into written words; or to send the waxen cylinder by post to a correspondent, who will place it on another phonograph and listen to the words originally spoken. A cylinder will carry about the same number of words as one of the pages of *Chambers's Journal*, and if the communication is only of ephemeral interest, the impression can be shaved off, so as to present a fresh surface for use. This operation can be repeated about fifty times before the cylinder material is exhausted.

A collection of fans which Lady Schreiber has lately presented to the British Museum has a value which is not ordinarily attached to these articles of feminine adornment, for they bear pictures illustrative of the social life and historical events of the time in which they were painted. These fans will therefore form most useful authorities for settling many a question with regard to manners and customs of a period which is far too remote to embrace illustrated journalism, to which we look in later years for information of the kind.

In a paper read before the London Camera Club, Mr Burchett, a well-known painter, who has for some time been doing good work as an amateur photographer, brought forward a method of using coloured glasses in conjunction with the lens which, according to specimen photographs exhibited by the author, is a distinct help in the better rendering of colour values. It is well known that an ordinary photograph will render blues much lighter than they should be, and that yellows and reds suffer in the opposite manner. This fault has been corrected by the introduction of chemically prepared plates, but Mr Burchett claims to do the same thing by far simpler means. He inserts between the component parts of a doublet lens two screens of glass, the one green, and the other yellow, and these so far modify the light which reaches the sensitive plate that a far more natural effect is obtained than under ordinary conditions. One notable feature of the landscapes shown was the perfect rendering of cloud effects. Lenses prepared according to Mr Burchett's method are being placed upon the market by Messrs Dallmeyer, the eminent opticians of London.

The story of Samson finding honey in the

carcase of the lion is perhaps the earliest reference to a superstition which is referred to by many writers, including Virgil, who in the 'Georgics' describes the whole process of producing artificially a swarm of bees from the dead body of an ox. An American writer, Mr G. H. Bryan, M.A., has done useful service in showing, in 'The University Correspondent,' how the idea originated. There is a remarkable likeness between certain flies of the order 'Diptera' (two-winged insects) and those of the order 'Hymenoptera,' to which bees belong. Of the former, the common drone fly is frequently seen about our houses in the autumn, and from its habit of visiting flowers in company with bees, it has been confounded with the honey-producer. The larvæ of this fly are deposited in putrefying animal matter, generally in these days in ditches and sewers; but in times when sanitation was a secondary matter, and when the bodies of animals were left to rot where they fell, the drone fly did not neglect the opportunity afforded, and the swarms of perfect insects which subsequently emerged from the carcase gave rise to the natural misconception which has lasted for so many centuries.

In a Blue-book recently issued appears an account, by one of Her Majesty's Inspectors of Mines, of the result of experiments with coal-dust collected from several mining districts. The experiments were made in a mine shaft, not in a laboratory, and from them the following conclusions have been drawn: That a gunpowder blast in the presence of dry coal-dust always ignites such dust, and so increases the burning and charring effects of the shot. That a large flame, such as that produced by a gunpowder charge, or by the ignition of a small quantity of fire-damp, will cause a dusty atmosphere to explode with great violence; that the explosion will continue throughout the length of that atmosphere, and will gather strength as it proceeds. That coal-dust from certain seams in different districts (named) are almost as sensitive to explosion as gunpowder itself. That, as a rule, the dust is more sensitive to explosion the higher its quality. That a ready supply of oxygen, such as is supplied by a brisk ventilation, makes explosions more probable and more severe; and that certain high explosives are incapable of igniting or exploding coal-dust. In view of these facts, it is recommended that gunpowder be abolished altogether from coal-mines, and that high explosives be substituted for it.

In an address on 'The Floor of the Ocean at Great Depths,' which was recently given before the Royal Society of Edinburgh, Dr John Murray alluded to a curious observation which was recorded among his researches connected with the *Challenger* Expedition. Certain species of animals, exclusive of Protozoa, were found both in the antarctic and arctic seas, but were missing in the intervening waters. Were they to jump to the conclusion that the same conditions produced the same species of animals from different origins, the Development school would not agree with them; but if a common origin was to be ascribed to these widely separated forms, where did they get it?

The theory he suggested was this: That the whole ocean at one time was warm, perhaps seventy or eighty degrees, and that then there was a universal fauna. These arctic and antarctic animals might be the relics of that fauna which had been able to accommodate themselves to the gradual cooling at the Poles, while others, unable to do so, were now found in the coral reef and tropical regions.

A public meeting was recently held at Shrewsbury to take into consideration the desirability of erecting a memorial to Charles Darwin, who was a native of that town.

The utilisation of waste products is a subject of paramount interest to every community, and so much has been done in recent years in this direction, that the word 'waste' as applied to manufactures has almost ceased to have any meaning. It is now recognised that the destruction of town refuse by fire is an important aid to efficient sanitation; but even here the heat raised in the process is no longer to be allowed to run to waste. Professor Henry Robinson, in conjunction with the engineer of St Pancras vestry, London, is now carrying out a plan for a combined Destructor and Electric-lighting Station—that is to say, the heat from the combustion of house-refuse will raise steam for producing the electric current. It will be remembered that the vestry named have long ago taken the business of electric lighting into their own hands, and it has proved a great success. Detailed particulars of the entire scheme are furnished in the Report of a paper by Professor Robinson, which is published in the 'Society of Arts Journal' under the title 'The St Pancras Electric-lighting Installation.'

In the recent annual Report of the Brooklyn Electrical Subway Commission, it is stated that there have been many discoveries of gas and water pipes which have become corroded through the action of ground-currents. The lead-covering of telephone cables in the subways is also deteriorating from the same cause, and complaints of such injuries from many districts are becoming common. The Peoria Water Company (Illinois) have formally notified the city authorities that their mains are being so injured by the ground-currents from the street railways, that unless steps are taken to remove this source of injury to their property, they will refuse to make further extensions of mains, or to be responsible for the good condition of those at present in use.

For a long time a great battle has been in progress between the makers of guns and projectiles on the one hand and the forgers of armour-plates on the other: first one side scores a success, and presently victory is given to the other. Projectiles have recently been made of such tough material that after impact against a steel target they show no sign of change. The armour-plates made of toughened or Harveyised steel also seem to bear without injury any blows directed against them. But a difficulty is found in fastening these plates to the sides of the vessels for which they are destined. With ordinary plates, there is no difficulty in cutting and boring the necessary holes to receive the bolts; but these hardened plates offer resistance to the tools, which cannot

be overcome unless the metal is first softened. The difficulty will no doubt be surmounted, but at present it is exercising the minds of naval experts.

THE MINISTER'S WOOLING.

It was evening in the manse. Æneas Cameron, elder and session-clerk, had just left. The minister sat like one dazed, his head bowed in his hands, the unfinished sermon by his elbow; for he felt 'sair hadden down.' Come of poor though decent farmer folk, and brought up to a life for which he was totally unsuited, he became known as 'Fleckless Sandy,' until an aunt died and left him her savings on condition that he entered the ministry. So, at an age when other men were settled in manse and had taken unto themselves wives, Alexander McColl set out for Glasgow and the university there. A tall, lanky figure, in ill-fitting homespun, walking to and from the college always alone; for he made no friends amongst the students, partly because he was so much older than they, and partly from shyness, which amounted almost to a physical infirmity.

That was long ago—before his appointment to the little West Highland parish, nestling amongst hills and glens, and inhabited by simple folk, who loved and respected him.

But somehow, gradually there arose a feeling that the minister had neglected his duty. It was only amongst a handful of tradesmen and farmers, and amounted to this—that the minister should have taken a wife before now. Almost all of them had sisters and daughters, only too willing to occupy the position. For twelve years he had been with them, and they didn't pretend to find fault with his mode of living. It was meet and right that a minister should not be taken up with women, and should keep them at a distance; and it was known he never spoke to one unless it was absolutely necessary; then he addressed his remarks to the ceiling or the floor. Still, he owed it to the parish to marry, and more especially now that he had been unfortunate in the way of house-keepers. He had tried all kinds—young, old, and middle-aged—each turned out worse than the other, till the climax arrived. His last importation—a total abstainer and gray-haired—opened the door to the chief elder with a lurch like a seaman's, and cap coquettishly poised over one ear. That clinched the matter. A meeting was held, and it was decided the only way out of the difficulty was to get the minister to marry; and the woman was fixed on—Belle Lauder, the schoolmaster's sister, a fine strapping lass with plenty of common-sense, and not too young. To Æneas Cameron, a man of experience, he having had three wives, was deputed the task of arranging it with the minister.

But the minister was obdurate—said he would prefer to starve on a crust than be driven into matrimony with any woman. Not that he found fault with Miss Belle; she was better than most, being given to minding her own business; but bad's the best, as he knew from his experience of Glasgow landladies and

serving-maids. They might depose or suspend him, and report him to the Presbytery for having a disorderly house—that was his misfortune, not his fault; and he would resign his parish, himself never!

Eneas feared his mission was hopeless; but ere he departed, played his trump card. 'Weel, minister,' he said dryly, with his hand on the door, 'you may tell all that to the lassie; it's no' me that will do it; and she having signified her willingness.'

Truth to say, Belle was entirely ignorant of the plot for her settlement.

'Heaven help me!' thought the wretched man, 'hedged in on every hand.—And she seemed willing! And will be waiting for me to propose.'

Women felt these things keenly, he had heard; perhaps she would feel jilted. To and fro he passed all night, up and down his small room, till the candle flared and spluttered in its socket, and then died out. The dawn broke rosy and beautiful over the hills, but still no peace for him. Then the years seemed to roll back, and he saw himself a schoolboy again, entering by the cottage door, a strapful of ragged books in his hand. Inside, his mother stood by her tub, one foot on the rocker of his little sister's cradle, and crooning to herself the words of an old ballad—

For the broken heart it kens
Nae second spring.

Were the words not ominous? Had he not heard that Belle once had a romance which ended in sorrow. A medical student passed with honours, and all the world seemed before him; but a cold caught in the dissecting room settled on his lungs, and the poor overworked frame had no fight left in it, and gave up at once to the unequal strife.

Yes; he would go to her that afternoon when school was dismissed. She would refuse him, only she was too proud to enter into it with the elder. And never would mortal man take his refusal so gratefully as he. Locked away in his desk was a little book, often read by him surreptitiously, for was he not a Presbyterian minister? It had been left behind in the old Glasgow days by a Roman Catholic artisan who lodged with him. He took it up now, and read: 'The sting of suffering is extracted when we cease to fight against it.'—'If thou carry thy cross willingly, it will carry thee . . . where there will be an end of suffering.'—'If thou sling away one cross, without doubt thou wilt find another, and perhaps a heavier one.'

Yes, Belle was his cross. Anyway, he would go to her, and not flee from her.

The shadows were lengthening over the common when the minister wended his way to the schoolhouse. By the parlour fire sat Belle, mending an old coat of her brother's for some poor man; the firelight flickered over her face and chased away the wrinkles—she looked almost pretty. At the minister's knock, she jumped up, and apologised for her brother's absence, never taking the visit to herself.

'Plague take the woman! Maiden modesty

was well enough 'twixt boys and girls; but couldn't she give a man a lead?'

'My housekeeper,' he began, 'has proved no better than her predecessors—if possible, worse—although this one was chosen on account of her gray hairs. It is a striking illustration of the depravity of human nature from the cradle to the grave—in females,' he added.

Without defending the stigma on her sex, she quietly offered her assistance in choosing a 'new girl,' as that was evidently what had brought the man. She appreciated the compliment of coming to her instead of to the married women.

Nobly he took the plunge. 'Miss Belle,' he said, 'I'm not a ladies' man, and the manse is but a humble home, though good enough for an old bachelor like me. There came back to me the lines of an old song my mother used to sing:

The broken heart it kens
Nae second spring.

Do you hold with that, Miss Belle?'

Was it the minister who spoke? The man who shunned women! Was the slur of old-maidhood to be removed for ever? The homely face was illumined as she looked shyly up, with glistening eyes and glowing cheeks: 'Not a second spring, perhaps; but a sort of Indian summer—valued all the more because of coming after cold and gloom and fading hopes.'

He was not, as he said, 'a ladies' man;' but he understood. And if his sacrifice was great, great also was his reward; for with the advent of Belle to the manse, so closed his domestic worries.

A VOICE OF BYGONE DAYS.

COULD I but hear the voice once more
That thrilled my heart in days of yore,
Its sweet, pathetic, tender power
Would soothe my spirit's darkest hour.

Before those notes of joy or pain,
The warbling bird would cease its strain;
And hovering lightly on the wing,
Enraptured, hear its rival sing.

Oh, wondrous power, sweet gift divine!
For which my wearied soul doth pine;
Oh, may I hear its sounds on High,
Mid angels' voices in the sky.

HELEN WILKIE.

* * TO CONTRIBUTORS.

- 1st. All communications should be addressed to the 'Editor, 339 High Street, Edinburgh.'
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